PULLER-THRUSTER DOWNHOLE TOOL

Abstract of the Disclosure

A method and apparatus for propelling a tool having a body within a passage. The tool includes a gripper including at least a gripper portion which can assume a first position that engages an inner surface of the passage and limits relative movement of the gripper portion relative to the inner surface. The gripper portion can also assume a second position that permits substantially free relative movement between the gripper portion and the inner surface of the passage. The tool includes a propulsion assembly for selectively continuously moving the body of the tool with respect to the gripper portion while the gripper portion is in the first position. This allows the tool to move different types of equipment within the passage. For example, the tool advantageously may be used in drilling processes to provide continuous force to a drill bit. This enables the drilling of extended horizontal boreholes. Other preferred uses for the tool include well completion, logging, retrieval, pipeline service, and communication line activities.

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